# Attitudes and opinions of French general practitioners towards tobacco

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#### **Abstract**

Objective - To assess attitudes and opinions of French general practitioners towards tobacco.

Design - A postal survey in 1991 of a national sample of 4318 French general practitioners using a questionnaire designed by the World Health Organisation and the International Union against Tuberculosis and Lung Disease (IUATLD) for health professionals.

Results – The mean age of the sample was  $41\pm9$  years, 80% of the practitioners were males. The prevalence of smoking was 32% (21% daily, 11% occasional). There were more never-smokers among females (41% vs 25%) and more in the age group <35 years than in those aged >45. Of daily smokers 54% claimed that they had made at least one attempt to stop smoking but only 32% expected to have stopped within five years of the survey.

Practitioners had a good knowledge of tobacco-related respiratory diseases but underestimated the risk of cardiovascular diseases. Only 37% (23% of daily smokers) would counsel a patient to stop smoking if he did not have a smoking-related illness and did not himself raise the question; 62% thought they had sufficient knowledge to advise their patients on stopping smoking.

Conclusions - These results, similar to those of the IUATLD worldwide survey of medical students, showed a lower prevalence of smoking in younger compared to older doctors and also demonstrated the influence of personal smoking on the attitude of practitioners towards smoking patients.

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### Introduction

During the last few years the Tobacco and Health Committee of the International Union against Tuberculosis and Lung Disease (IUATLD) has initiated, with the help of the World Health Organisation (WHO), a series of surveys on smoking behaviour and attitudes of health professionals, most notably a worldwide study of first- and final-year medical students.

These surveys<sup>1-4</sup> have shown that in many countries (especially in France) final-year students still lacked knowledge of smoking-related diseases and did not have a preventive

approach to smoking patients. Moreover their attitudes towards smoking problems were much influenced by their personal smoking behaviour. Such deficiencies are important as these future practitioners will be, to quote Richmond and Webster,<sup>5</sup> "in a strategic position" to help patients to stop smoking.

There are few recent data on French general practitioners and tobacco, despite new antitobacco laws and regulations in France. Accordingly we thought it useful to study their attitudes and opinions, as we had done for medical students. With the help of the Ordre National des Médecins, the French cooperative and administrative organisation for doctors, we conducted a survey in 1991 of a sample of general practitioners.

### Subjects and methods

One administrative subdivision (Department) was randomly selected from each of the 22 French administrative Regions. Questionnaires were sent by the Ordre National des Médecins to all general practitioners in each selected Department, a total of 11800 doctors.

The questionnaire, based on the IUATLD and WHO questionnaires for health professionals, 2.6 covered personal smoking behaviour, the perceived importance of different reasons for stopping smoking, knowledge of tobacco-related diseases, attitudes towards smoking patients; and opinions on preventive measures, including laws and regulations against tobacco.

For organisational and financial reasons, it was not possible to send a reminder to all non-responders to the first mailing. Instead, a second questionnaire was sent to a random subsample of 1118 non-responders. The 628 responses received from the subsample (response rate: 56%) did not differ for any of the items from the 3795 responses (response rate: 32%) received from the initial mailing. The total number of questionnaires received was therefore 4423 (3795+628), giving an overall response rate of 37%. Among these, only 4318 answered the main items concerning age, sex, and smoking behaviour. The remaining 105 were therefore excluded from the analysis.

Statistical comparisons were made using univariate analysis. Differences were evaluated by the Chi-square test. Where ranges are given in the text, they represent 95% confidence limits

Smokers were divided into those who smoked daily and those who smoked only

Table 1 Demographic data

|               |                  | Age (years)        |                   |                                |  |  |
|---------------|------------------|--------------------|-------------------|--------------------------------|--|--|
|               | < 35  (n = 1395) | 35-45 $(n = 1965)$ | > 45<br>(n = 958) | All practitioners $(n = 4318)$ |  |  |
| Sex (%)*      |                  |                    |                   |                                |  |  |
| Male          | 65               | 83                 | 93                | 80                             |  |  |
| Female        | 35               | 17                 | 7                 | 20                             |  |  |
| Residence (%) |                  |                    |                   |                                |  |  |
| City          | 21               | 19                 | 20                | 20                             |  |  |
| Town          | 40               | 41                 | 45                | 42                             |  |  |
| Village       | 39               | 40                 | 35                | 38                             |  |  |

<sup>\*</sup>p < 0.001

occasionally. Ex-smokers were those who formerly smoked for at least six months but no longer did so. "Never-smokers" is self-explanatory.

#### Results

### DEMOGRAPHIC DATA (TABLE 1)

Of the 4318 doctors studied, 62 % lived in a city or town, 38 % in a rural area. There was no difference in distribution according to age. The mean age was  $41\pm9$  years. Overall 80 % were males. Sex distribution varied with age group: there were 7 % of females in those aged more than 45, and 35 % in those aged 35 or less.

#### PERSONAL SMOKING STATUS

Of the 4318 doctors studied, 32% were smokers (both sexes combined); 21% daily smokers and 11% occasional smokers; 40% were ex-smokers and 28% never-smokers.

Smoking behaviour differed significantly according to age and sex (p < 0.001) (table 2). There were more daily smokers in males than in females (22 % vs 14 %) and more neversmokers in females (41 % vs 25 %). The pro-

portion of never-smokers was higher in young doctors (38 % in males and 47 % in females less than 35 years old) than in older doctors (14 % in males and 35 % in females aged more than 45).

Most smoked filter-tipped cigarettes (62 % among daily smokers). The mean daily cigarette consumption was  $15\pm10$  in males and  $11\pm9$  in females.

Overall, 54 % of daily and 48 % of occasional smokers claimed to have made at least one serious attempt to stop smoking. Some 32 % of daily smokers and 81 % of occasional smokers expected to have stopped within five years of the survey.

## REASONS FOR PRACTITIONERS NOT SMOKING PERSONALLY (TABLE 3)

Symptoms, protecting one's own health, self discipline, and setting an example to children were rated the most important reasons for practitioners not smoking personally. As expected, there were few differences between exsmokers and never-smokers but the figures for daily smokers were lower for each potential reason for not smoking.

KNOWLEDGE OF THE DANGERS OF TOBACCO Virtually all practitioners (99%) strongly agreed that smoking is harmful to health; only 32 practitioners disagreed. There were no significant differences related to gender, age, or even smoking status.

KNOWLEDGE OF CIGARETTE SMOKING AS A MAJOR CAUSE OF SPECIFIC DISEASES

Table 4 demonstrates good knowledge of the pathogenic effect of cigarette smoking for the

Table 2 Smoking status by gender (male, M, and female, F) and age

|   | Smoking status       |                      |                      |                    |                      |                      |                      |                      |                            |                         |
|---|----------------------|----------------------|----------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------------|-------------------------|
|   |                      | smoker<br>%)         |                      | smoker<br>%)       |                      | noker<br>(6)         | Never-               | smoker<br>(6)        | All prac $(n=4)$           |                         |
|   | M                    | F                    | M                    | F                  | М                    | F                    | М                    | F                    | M                          | F                       |
| Age < 35*<br>Age 36-45*<br>Age > 45*<br>All | 22<br>24<br>19<br>22 | 15<br>13<br>13<br>14 | 13<br>11<br>10<br>11 | 11<br>8<br>6<br>10 | 27<br>41<br>56<br>41 | 28<br>44<br>46<br>35 | 38<br>23<br>14<br>25 | 47<br>34<br>35<br>41 | 909<br>1631<br>895<br>3435 | 486<br>334<br>63<br>883 |

 $<sup>\</sup>star p < 0.001$  for males and females

Table 3 "How do you personally assess the importance of the reasons for not smoking yourself?" Percentage of those answering "strongly agree", according to smoking status

|                           | Daily smoker $(n = 894)$ | Occas smoker $(n = 477)$ | Ex-smoker (n = 1725) | Never-smoker $(n = 1222)$ | All practitioners $(n = 4318)$ |
|---------------------------|--------------------------|--------------------------|----------------------|---------------------------|--------------------------------|
| 1 Protect your health*    | 51                       | 61                       | 69                   | 74                        | 64                             |
| 2 Symptoms*               | 63                       | 71                       | 63                   | 75                        | 66                             |
| 3 Self discipline*        | 54                       | 61                       | 69                   | 71                        | 64                             |
| 4 Example to patient*     | 26                       | 43                       | 45                   | 55                        | 42                             |
| 5 Example to children*    | 51                       | 64                       | 64                   | 73                        | 63                             |
| 6 Discomfort*             | 40                       | 54                       | 46                   | 67                        | 50                             |
| 7 Example to health work* | 7                        | 22                       | 23                   | 34                        | 21                             |
| 8 To save money*          | 2                        | 2                        | 4                    | 9                         | 4                              |
| 9 Example to adults*      | $1\overline{1}$          | 23                       | 25                   | 35                        | 23                             |
| 0 Pressure of colleagues  | 5                        | 5                        | 3                    | 7                         | 5                              |

<sup>\*</sup>p < 0.001

Table 4 Percentage answering "yes" to the question: "Is cigarette smoking a major cause of these diseases?", by age

|                             | Age (years)        |                    |                   |                                |
|-----------------------------|--------------------|--------------------|-------------------|--------------------------------|
|                             | < 35 $ (n = 1395)$ | 35-45 $(n = 1965)$ | > 45 $ (n = 958)$ | All practitioners $(n = 4318)$ |
| Lung cancer                 | 86                 | 85                 | 82                | 85                             |
| Chronic bronchitis          | 79*                | 76                 | 67                | 75                             |
| Oral cancer                 | 63                 | 64                 | 59                | 63                             |
| Laryngeal cancer            | 73                 | 73                 | 68                | 72                             |
| Coronary diseases           | 64*                | 60                 | 53                | 60                             |
| Oral leukoplakia            | 56                 | 58                 | 53                | 56                             |
| Oral soft tissue lesion     | 33                 | 36                 | 36                | 35                             |
| Peripheral vascular disease | 61*                | 60                 | 50                | 58                             |
| Neonatal death              | 6                  | 5                  | 4                 | 5                              |
| Bladder cancer              | 26                 | 25                 | 23                | 25                             |

<sup>\*</sup>p < 0.001 (age < 35 vs > 45); Non-significant for other items

Table 5 Percentage answering "often" to the questions "In these three situations would you advise patients against smoking? Situation 1: When the patient has symptoms/confirmed diagnosis of smoking-related diseases. Situation 2: When the patient himself raises the question about smoking. Situation 3: When the patient is a smoker who has no symptoms/diagnosis of smoking-related diseases and does not himself raise the question of smoking."

|  |                          | Smoking status           |                        |                                |                                |  |  |  |
|--|--------------------------|--------------------------|------------------------|--------------------------------|--------------------------------|--|--|--|
|  | Daily smoker $(n = 894)$ | Occas smoker $(n = 477)$ | Ex-smoker $(n = 1725)$ | $ Never-smoker \\ (n = 1222) $ | All practitioners $(n = 4318)$ |  |  |  |
| Situation 1<br>Situation 2<br>Situation 3* | 99<br>89<br>23           | 99<br>92<br>38           | 99<br>94<br>39         | 99<br>95<br>45                 | 99<br>93<br>37                 |  |  |  |

<sup>\*</sup>p < 0.001

majority of listed diseases (especially respiratory diseases) but poor knowledge for peripheral vascular disease and bladder cancer.

Young doctors were significantly better informed of the risks for chronic bronchitis, coronary artery disease, and peripheral vascular disease than those over 45 years old (p < 0.001).

# ATTITUDES OF PRACTITIONERS TOWARDS PATIENTS' SMOKING

In response to the question "In the following situations would you advise patients against smoking?", three situations were proposed, with the practitioner being asked, in reply, to choose between often, sometimes, rarely, or never. Table 5 shows the overall replies for all practitioners, and by smoking status:

Situation 1: In a patient with a smoking-related condition, all practitioners, even the smokers, would advise against smoking.

Situation 2: When the patient himself raises a question about smoking, a high proportion would advise stopping smoking though the figure was slightly lower for doctors who themselves smoked daily.

Situation 3: When a patient is a smoker who has no symptoms or diagnosis of a smoking-related disease and does not himself raise the question of smoking, only a small proportion of practitioners would intervene (37%). Moreover smokers, especially daily smokers, were significantly less likely than never- and exsmokers to suggest stopping smoking (p < 0.001). The figure for occasional smokers (38%) was significantly less than that for never-smokers (45%) (p < 0.02).

FRENCH PRACTITIONERS AND THE ANTISMOKING CAMPAIGN

To the question "What is the role of doctors in the antismoking campaign?" practitioners were invited to indicate "the extent to which you agree or disagree with each of the following statements". Nine propositions concerning the attitudes of doctors are listed in table 6, which shows the percentage answering "strongly agree" by smoking status.

As expected, for some of the statements (notably numbers 2–4) the answers of smokers differed from those of never-smokers, especially regarding doctors' exemplar role (p < 0.001).

Only 62% of practitioners felt they had sufficient knowledge to counsel patients on stopping smoking. There was a significant difference in response according to age (not shown in the table): 71% among the oldest doctors felt adequately equipped in contrast to 56% among doctors aged 35 or less (p < 0.001).

# DOCTORS' ATTITUDES TOWARDS LAWS FOR CONTROLLING THE TOBACCO PROBLEM

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Respondents were asked the following question: "A number of different opinions have been expressed about how to reduce smoking through legislative action, would you agree or disagree with the following opinions?" Table 7 gives the responses for seven items and the percentage who replied "strongly agree" by smoking status. The least support was given to banning tobacco advertising and for increasing tobacco taxation. The latter was supported by only 40% of daily smokers.

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Table 6 "Indicate the extent to which you agree or disagree with each of the statements." Percentage answering "strongly agree", according to smoking status

|   |  | Smoking status           |                           |                      |                                |                                |
|---|--|--------------------------|---------------------------|----------------------|--------------------------------|--------------------------------|
|   |  | Daily smoker $(n = 894)$ | Occas smoker<br>(n = 477) | Ex-smoker (n = 1725) | $ Never-smoker \\ (n = 1222) $ | All practitioners $(n = 4318)$ |
| 1 | It is the doctor's responsibility to convince people to stop<br>smoking              | 80                       | 82                        | 85                   | 83                             | 83                             |
| 2 | Smokers could stop if they wanted  | 68*                      | 76                        | 79                   | 80                             | 77                             |
| 3 | It is annoying to be near a person who is smoking                                    | 63*                      | 75                        | 83                   | 92                             | 80                             |
| 4 | Doctors should set a good example by not smoking                                     | 51*                      | 67                        | 77                   | 82                             | 72                             |
| 5 | Most people will not stop smoking even if their doctor tells them to                 | 59                       | 60                        | 59                   | 62                             | 60                             |
| 6 | Doctors should be more active in speaking to lay groups about smoking                | 75                       | 80                        | 80                   | 81                             | 79                             |
| 7 | Doctors would be more likely to advise stopping smoking if they knew a good approach | 85*                      | 77                        | 71                   | 77                             | 76                             |
| 8 |  | 60                       | 59                        | 67                   | 58                             | 62                             |
| 9 | At every contact you should dissuade a patient from smoking                          | 74*                      | 79                        | 82                   | 82                             | 80                             |

<sup>\*</sup>p < 0.001 (daily smokers vs never-smokers)

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Table 7 "A number of opinions have been expressed about how to reduce smoking through legislative action. Would you agree or disagree with the following opinions?" Percentage answering "strongly agree", according to smoking status and year

|  | Daily smoker $(n = 894)$ | Occas smoker $(n = 477)$ | Ex-smoker (n = 1725) | Never-smoker $(n = 1222)$ | All practitioners $(n = 4318)$ |
|--|--------------------------|--------------------------|----------------------|---------------------------|--------------------------------|
| Health warning on cigarette pack         | 79*                      | 84                       | 83                   | 86                        | 83                             |
| Complete ban on advertising              | 58*                      | 66                       | 69                   | 73                        | 67                             |
| Tobacco in public places restricted      | 89*                      | 97                       | 96                   | 97                        | 95                             |
| Price of tobacco increased               | 40*                      | 60                       | 65                   | 73                        | 69                             |
| Sale of tobacco to children prohibited   | 83                       | 88                       | 83                   | 88                        | 85                             |
| Smoking in hospital restricted           | 96                       | 97                       | 94                   | 95                        | 95                             |
| Health professionals should get training | 79                       | 78                       | 79                   | 83                        | 80                             |

<sup>\*</sup>p < 0.001 (daily smokers vs never-smokers)

#### Discussion

How representative was the sample available for analysis? Although it only represents a 37% overall response rate, the fact that a subsample who responded to a reminder sent to initial non-responders showed no differences in their answers to the questionnaire suggests that our sample may be reasonably representative. In particular, there was no difference in the prevalence of smoking in the first sample and the subsample. Moreover, except for four out of 22 Departments, the average age in the two samples did not differ by more than five years; in those four it was less than ten years. Nevertheless there is a theoretical possibility that initial responders and initial nonresponders are different from persistent nonresponders. If true, smokers might be overrepresented among persistent nonresponders since they might be less likely to fill out a questionnaire about smoking. Thus, any nonresponse bias would likely make our estimate of smoking prevalence an underestimate.

There are no overall data on trends in smoking prevalence in French doctors over the last decade. Figures for doctors in Europe, recently reported by Masironi, show a decrease since 1966. A similar downward trend has been found in several successive surveys of doctors in southwestern France between 1966 and 1980: 65% of smokers in 1966, 53% in 1970, and 42% in 1980; compared to 32% in the present survey of the whole of France. Masironi refers to a number of surveys in different European countries which show a similar decrease. 9-13 He also notes similar

findings to our own survey: a lack of knowledge about smoking as a cause of specific disease and a hesitancy in advising patients to stop smoking.

Our results suggest a tendency for successive cohorts of doctors to have a lower smoking prevalence. "Never-smokers" comprised 41 % of our youngest age group (< 35); this was nearly three times the rate (16 %) in the oldest group (age > 45). The smoking prevalence, knowledge and attitudes in the young doctors were similar to those in French final-year medical students in the IUATLD study<sup>14</sup> (table 8). An important factor in influencing the doctor's attitude is clearly his own smoking behaviour (table 3); this, of course, particularly affects doctors' beliefs about their responsibility to serve as an exemplar. 15

Attitudes and opinions of daily smokers were somewhat different from those of occasional smokers, which were closer to those of ex-smokers and never-smokers. Only 23% of daily smoking doctors would intervene with a patient in the third Situation (no symptoms and no question from the patient about smoking) vs 38% of occasional smokers, 39% of ex-smokers, and 45% of never-smokers (table 5). The trend was similar for the exemplar role of practitioners (table 6): while 67% of occasional smokers, 77% of ex-smokers, and 82% of never-smokers agreed that the doctor should set an example to patients, only 51% of daily smokers agreed.

In 1991, 99% of French general practitioners were convinced that smoking was a danger to health, although only 37% would

Table 8 Attitudes towards tobacco in young practitioners and final-year French medical students (IUATLD survey)

|  | Young practitioners<br>(n = 1395) | Final-year medical students $(n = 64)$ |
|--|-----------------------------------|--|
| Mean age (years)   | 32±2                              | 24                                     |
| Smoking status (%)* Daily smokers Occas. smokers Ex-smokers Never smokers      | 20<br>12<br>27<br>41              | 31<br>13<br>19<br>36                   |
| Knowledge of diseases (%)*<br>Lung cancer<br>Periph vasc dis<br>Bladder cancer | 86<br>61<br>26                    | 94<br>72<br>23                         |
| Advising patients to stop Situation 3**  | 35                                | 33                                     |
| Knowledge sufficient to advise patients (strongly agree)***                    | 53                                | 34                                     |

\* Non-significant

\*\* Situation 3: When the patient is a smoker who has no symptoms/diagnosis of smokingrelated diseases and does not himself raise the question of smoking. p < 0.008.

> advise a smoking patient to stop smoking if he did not have a smoking-related illness and did not raise the question himself. We found a similar paradox in our worldwide survey of medical students. This attitude may be partly due to doctors concerning themselves primarily with treating their patients rather than protecting them from future disease. Another factor may be some doctors' lack of confidence in their skills as counsellors; 38% felt they lacked sufficient knowledge about counselling and 76 % believed that doctors would be more likely to advise stopping smoking if they knew a good approach that really worked. In addition, even though 62 % of doctors thought their knowledge was sufficient to counsel on stopping smoking, many of these doctors may not have truly mastered the skills necessary to treat tobacco dependence effectively.

> Regarding knowledge of tobacco-related disease, most doctors in our survey were aware of smoking as a major cause of respiratory diseases (lung cancer, laryngeal cancer, chronic bronchitis), but fewer appreciated its importance in cardiovascular disease (coronary artery and peripheral vascular disease) (the questionnaire was designed before the role of smoking was clearly established in stroke), and fewer still in bladder cancer (table 4). Younger doctors were marginally better informed than those over 45.

> In France, as in many countries where new laws and regulations have been introduced in recent years, it would be useful to conduct similar surveys on a regular basis, as has been done in the USA.16-19 By this means one can assess the impact of legislation, and the changing climate of opinion, on doctors'

smoking behaviour and on their approach to smoking patients. We hope that the present survey will, of itself, have some influence on medical opinion in France and put the accent on needed reforms in physician training during and after medical school.

We are most grateful to all the French general practitioners who

took the trouble to participate in the survey.

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